

PT/10

CRF Errors Edited by the STIC Systems Branch

Serial Number: 10/506,925

CRF Edit Date: 9/17/04
Edited by: AS

Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

ENTERED

Corrected the SEQ ID NO. Sequence numbers edited were:

Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

Deleted: _____ invalid beginning/end-of-file text ; _____ page numbers

Inserted mandatory headings/numeric identifiers, specifically:

Moved responses to same line as heading/numeric identifier, specifically:

Other:



PCT

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/506,925

DATE: 09/17/2004
TIME: 15:30:17

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\09172004\J506925.raw

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1 <110> APPLICANT: Neurogenex Co., Ltd.
3 <120> TITLE OF INVENTION: ENHANCED INSERTED YELLOW FLUORESCENCE PROTEIN AND ITS
4 APPLICATION
7 <130> FILE REFERENCE: PN0023095.00
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/506,925
C--> 9 <141> CURRENT FILING DATE: 2004-09-07
9 <150> PRIOR APPLICATION NUMBER: KR10-2002-0012409
10 <151> PRIOR FILING DATE: 2002-03-08
12 <150> PRIOR APPLICATION NUMBER: KR10-2002-0015217
13 <151> PRIOR FILING DATE: 2002-03-21
15 <150> PRIOR APPLICATION NUMBER: KR10-2002-0015219
16 <151> PRIOR FILING DATE: 2002-03-21
18 <160> NUMBER OF SEQ ID NOS: 16
20 <170> SOFTWARE: KopatentIn 1.71
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 738
24 <212> TYPE: PRT
25 <213> ORGANISM: Artificial Sequence
27 <220> FEATURE:
28 <223> OTHER INFORMATION: y-citrine of fluorescence protein
31 <400> SEQUENCE: 1
32 Ala Thr Gly Gly Thr Gly Ala Gly Cys Ala Ala Gly Gly Cys Gly
33 1 5 10 15
35 Ala Gly Gly Ala Gly Cys Thr Gly Thr Thr Cys Ala Cys Cys Gly Gly
36 20 25 30
38 Gly Gly Thr Gly Gly Thr Gly Cys Cys Cys Ala Thr Cys Cys Thr Gly
39 35 40 45
41 Gly Thr Cys Gly Ala Gly Cys Thr Gly Gly Ala Cys Gly Gly Cys Gly
42 50 55 60
44 Ala Cys Gly Thr Ala Ala Ala Cys Gly Gly Cys Cys Ala Cys Ala Ala
45 65 70 75 80
47 Gly Thr Thr Cys Ala Gly Cys Gly Thr Gly Thr Cys Cys Gly Gly Cys
48 85 90 95
50 Gly Ala Gly Gly Cys Gly Ala Gly Gly Cys Gly Ala Thr Gly
51 100 105 110
53 Cys Cys Ala Cys Cys Thr Ala Cys Gly Gly Cys Ala Ala Gly Cys Thr
54 115 120 125
56 Gly Ala Cys Cys Cys Thr Gly Ala Ala Gly Thr Thr Cys Ala Thr Cys
57 130 135 140
59 Thr Gly Cys Ala Cys Cys Ala Cys Cys Gly Gly Cys Ala Ala Gly Cys
60 145 150 155 160
62 Thr Gly Cys Cys Cys Gly Thr Gly Cys Cys Cys Thr Gly Gly Cys Cys
63 165 170 175

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65 Cys Ala Cys Cys Cys Thr Cys Gly Thr Gly Ala Cys Thr Ala Cys Cys
66 180 185 190
68 Thr Thr Cys Gly Gly Cys Thr Ala Cys Gly Gly Cys Cys Thr Gly Ala
69 195 200 205
71 Thr Gly Thr Gly Cys Thr Thr Cys Gly Cys Cys Gly Cys Thr Ala
72 210 215 220
74 Cys Cys Cys Gly Ala Cys Cys Ala Cys Ala Thr Gly Ala Ala Gly
75 225 230 235 240
77 Cys Ala Gly Cys Ala Cys Gly Ala Cys Thr Thr Cys Thr Thr Cys Ala
78 245 250 255
80 Ala Gly Thr Cys Cys Gly Cys Cys Ala Thr Gly Cys Cys Cys Gly Ala
81 260 265 270
83 Ala Gly Gly Cys Thr Ala Cys Gly Thr Cys Cys Ala Gly Gly Ala Gly
84 275 280 285
86 Cys Gly Cys Ala Cys Cys Ala Thr Cys Thr Thr Cys Thr Thr Cys Ala
87 290 295 300
89 Ala Gly Gly Ala Cys Gly Ala Cys Gly Cys Ala Ala Cys Thr Ala
90 305 310 315 320
92 Cys Ala Ala Gly Ala Cys Cys Cys Gly Cys Gly Cys Cys Gly Ala Gly
93 325 330 335
95 Gly Thr Gly Ala Ala Gly Thr Thr Cys Gly Ala Gly Gly Gly Cys Gly
96 340 345 350
98 Ala Cys Ala Cys Cys Cys Thr Gly Gly Thr Gly Ala Ala Cys Cys Gly
99 355 360 365
101 Cys Ala Thr Cys Gly Ala Gly Cys Thr Gly Ala Ala Gly Gly Cys
102 370 375 380
104 Ala Thr Cys Gly Ala Cys Thr Thr Cys Ala Ala Gly Gly Ala Gly Gly
105 385 390 395 400
107 Ala Cys Gly Gly Cys Ala Ala Cys Ala Thr Cys Cys Thr Gly Gly Gly
108 405 410 415
110 Gly Cys Ala Cys Ala Ala Gly Cys Thr Gly Gly Ala Gly Thr Ala Cys
111 420 425 430
113 Ala Ala Cys Thr Ala Cys Gly Gly Thr Gly Gly Ala Thr Cys Cys Gly
114 435 440 445
116 Gly Thr Gly Cys Thr Ala Gly Cys Ala Ala Cys Ala Gly Cys Cys Ala
117 450 455 460
119 Cys Ala Ala Cys Gly Thr Cys Thr Ala Thr Ala Thr Cys Ala Thr Gly
120 465 470 475 480
122 Gly Cys Cys Gly Ala Cys Ala Ala Gly Cys Ala Gly Ala Ala Gly Ala
123 485 490 495
125 Ala Cys Gly Gly Cys Ala Thr Cys Ala Ala Gly Gly Thr Gly Ala Ala
126 500 505 510
128 Cys Thr Thr Cys Ala Ala Gly Ala Thr Cys Cys Gly Cys Cys Ala Cys
129 515 520 525
131 Ala Ala Cys Ala Thr Cys Gly Ala Gly Gly Ala Cys Gly Gly Cys Ala
132 530 535 540
134 Gly Cys Gly Thr Gly Cys Ala Gly Cys Thr Cys Gly Cys Cys Gly Ala
135 545 550 555 560
137 Cys Cys Ala Cys Thr Ala Cys Cys Ala Gly Cys Ala Gly Ala Ala Cys

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138	565	570	575	
140 Ala Cys Cys Cys Cys Cys Ala Thr Cys Gly Gly Cys Gly Ala Cys Gly				
141	580	585	590	
143 Gly Cys Cys Cys Cys Gly Thr Gly Cys Thr Gly Cys Thr Gly Cys Cys				
144	595	600	605	
146 Cys Gly Ala Cys Ala Ala Cys Cys Ala Cys Thr Ala Cys Cys Thr Gly				
147	610	615	620	
149 Ala Gly Cys Thr Ala Cys Cys Ala Gly Thr Cys Cys Gly Cys Cys Cys				
150	625	630	635	640
152 Thr Gly Ala Gly Cys Ala Ala Ala Gly Ala Cys Cys Cys Cys Ala Ala				
153	645	650	655	
155 Cys Gly Ala Gly Ala Ala Gly Cys Gly Cys Gly Ala Thr Cys Ala Cys				
156	660	665	670	
158 Ala Thr Gly Gly Thr Cys Cys Thr Gly Cys Thr Gly Gly Ala Gly Thr				
159	675	680	685	
161 Thr Cys Gly Thr Gly Ala Cys Cys Gly Cys Cys Gly Cys Cys Gly Gly				
162	690	695	700	
164 Gly Ala Thr Cys Ala Cys Thr Cys Thr Cys Gly Gly Cys Ala Thr Gly				
165	705	710	715	720
167 Gly Ala Cys Gly Ala Gly Cys Thr Gly Thr Ala Cys Ala Ala Gly Thr				
168	725	730	735	
170 Ala Ala				
174 <210> SEQ ID NO: 2				
175 <211> LENGTH: 738				
176 <212> TYPE: PRT				
177 <213> ORGANISM: Artificial Sequence				
179 <220> FEATURE:				
180 <223> OTHER INFORMATION: Peridot of fluorescence protein				
183 <400> SEQUENCE: 2				
184 Ala Thr Gly Gly Thr Gly Ala Gly Cys Ala Ala Gly Gly Cys Gly				
185	1	5	10	15
187 Ala Gly Gly Ala Gly Cys Thr Gly Thr Thr Cys Ala Cys Cys Gly Gly				
188	20	25	30	
190 Gly Gly Thr Gly Gly Thr Gly Cys Cys Cys Ala Thr Cys Cys Thr Gly				
191	35	40	45	
193 Gly Thr Cys Gly Ala Gly Cys Thr Gly Gly Ala Cys Gly Gly Cys Gly				
194	50	55	60	
196 Ala Cys Gly Thr Ala Ala Ala Cys Gly Gly Cys Cys Ala Cys Ala Ala				
197	65	70	75	80
199 Gly Thr Thr Cys Ala Gly Cys Gly Thr Gly Thr Cys Cys Gly Gly Cys				
200	85	90	95	
202 Gly Ala Gly Gly Cys Gly Ala Gly Gly Cys Gly Ala Thr Gly				
203	100	105	110	
205 Cys Cys Ala Cys Cys Thr Ala Cys Gly Gly Cys Ala Ala Gly Cys Thr				
206	115	120	125	
208 Gly Ala Cys Cys Cys Thr Gly Ala Ala Gly Thr Thr Cys Ala Thr Cys				
209	130	135	140	
211 Thr Gly Cys Ala Cys Cys Ala Cys Cys Gly Gly Cys Ala Ala Gly Cys				
212	145	150	155	160

RAW SEQUENCE LISTING

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214 Thr Gly Cys Cys Cys Gly Thr Gly Cys Cys Cys Thr Gly Gly Cys Cys
 215 165 170 175
 217 Cys Ala Cys Cys Cys Thr Cys Gly Thr Gly Ala Cys Thr Ala Cys Cys
 218 180 185 190
 220 Thr Thr Cys Gly Gly Cys Thr Ala Cys Gly Gly Cys Cys Thr Gly Ala
 221 195 200 205
 223 Thr Gly Thr Gly Cys Thr Thr Cys Gly Cys Cys Cys Gly Cys Thr Ala
 224 210 215 220
 226 Cys Cys Cys Cys Gly Ala Cys Cys Ala Cys Ala Thr Gly Ala Ala Gly
 227 225 230 235 240
 229 Cys Ala Gly Cys Ala Cys Gly Ala Cys Thr Thr Cys Thr Thr Cys Ala
 230 245 250 255
 232 Ala Gly Thr Cys Cys Gly Cys Cys Ala Thr Gly Cys Cys Cys Gly Ala
 233 260 265 270
 235 Ala Gly Gly Cys Thr Ala Cys Gly Thr Cys Cys Ala Gly Gly Ala Gly
 236 275 280 285
 238 Cys Gly Cys Ala Cys Cys Ala Thr Cys Thr Thr Cys Thr Thr Cys Ala
 239 290 295 300
 241 Ala Gly Gly Ala Cys Gly Ala Cys Gly Gly Cys Ala Ala Cys Thr Ala
 242 305 310 315 320
 244 Cys Ala Ala Gly Ala Cys Cys Cys Gly Cys Gly Cys Gly Ala Gly
 245 325 330 335
 247 Gly Thr Gly Ala Ala Gly Thr Thr Cys Gly Ala Gly Gly Cys Gly
 248 340 345 350
 250 Ala Cys Ala Cys Cys Cys Thr Gly Gly Thr Gly Ala Ala Cys Cys Gly
 251 355 360 365
 253 Cys Ala Thr Cys Gly Ala Gly Cys Thr Gly Ala Ala Gly Gly Cys
 254 370 375 380
 256 Ala Thr Cys Gly Ala Cys Thr Thr Cys Ala Ala Gly Gly Ala Gly Gly
 257 385 390 395 400
 259 Ala Cys Gly Gly Cys Ala Ala Cys Ala Thr Cys Cys Thr Gly Gly Gly
 260 405 410 415
 262 Gly Cys Ala Cys Ala Ala Gly Cys Thr Gly Gly Ala Gly Thr Ala Cys
 263 420 425 430
 265 Ala Ala Cys Thr Ala Cys Gly Gly Thr Gly Gly Ala Thr Cys Cys Gly
 266 435 440 445
 268 Gly Thr Gly Cys Thr Ala Gly Cys Ala Ala Cys Ala Gly Cys Cys Ala
 269 450 455 460
 271 Cys Ala Ala Cys Gly Thr Cys Thr Ala Thr Ala Thr Cys Ala Thr Gly
 272 465 470 475 480
 274 Gly Cys Cys Gly Ala Cys Ala Ala Gly Cys Ala Gly Ala Ala Gly Ala
 275 485 490 495
 277 Ala Cys Gly Gly Cys Ala Thr Cys Ala Ala Gly Gly Thr Gly Ala Ala
 278 500 505 510
 280 Cys Thr Thr Cys Ala Ala Gly Ala Thr Cys Cys Gly Cys Cys Ala Cys
 281 515 520 525
 283 Ala Ala Cys Ala Thr Cys Gly Ala Gly Gly Ala Cys Gly Gly Cys Ala
 284 530 535 540
 286 Gly Cys Gly Thr Gly Cys Ala Gly Cys Thr Cys Gly Cys Cys Gly Ala

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287	545	550	555	560
289	Cys Cys Ala Cys Thr Ala Cys Cys Ala Gly Cys Ala Gly Ala Ala Cys			
290	565	570	575	
292	Ala Cys Cys Cys Cys Ala Thr Cys Gly Gly Cys Gly Ala Cys Gly			
293	580	585	590	
295	Gly Cys Cys Thr Cys Gly Thr Gly Cys Thr Gly Cys Thr Gly Cys Cys			
296	595	600	605	
298	Cys Gly Ala Cys Ala Ala Cys Cys Ala Cys Thr Ala Cys Cys Thr Gly			
299	610	615	620	
301	Ala Gly Cys Thr Ala Cys Cys Ala Gly Thr Cys Cys Gly Cys Cys Cys			
302	625	630	635	640
304	Thr Gly Ala Gly Cys Ala Ala Gly Ala Cys Cys Cys Cys Ala Ala			
305	645	650	655	
307	Cys Gly Ala Gly Ala Ala Gly Cys Gly Cys Gly Ala Thr Cys Ala Cys			
308	660	665	670	
310	Ala Thr Gly Gly Thr Cys Cys Thr Gly Cys Thr Gly Gly Ala Gly Thr			
311	675	680	685	
313	Thr Cys Gly Thr Gly Ala Cys Cys Gly Cys Cys Gly Cys Cys Gly Gly			
314	690	695	700	
316	Gly Ala Thr Cys Ala Cys Thr Ala Thr Cys Gly Gly Cys Ala Thr Gly			
317	705	710	715	720
319	Gly Ala Cys Gly Ala Gly Cys Thr Gly Thr Ala Cys Ala Ala Gly Thr			
320	725	730	735	
322	Ala Ala			
326	<210> SEQ ID NO: 3			
327	<211> LENGTH: 45			
328	<212> TYPE: DNA			
329	<213> ORGANISM: Artificial Sequence			
331	<220> FEATURE:			
332	<223> OTHER INFORMATION: BamHi/5AB-F primer			
335	<400> SEQUENCE: 3			
336	ggggggatcc gaggtggtg aggacgttgt ctgctgctcg atgtc			45
339	<210> SEQ ID NO: 4			
340	<211> LENGTH: 45			
341	<212> TYPE: DNA			
342	<213> ORGANISM: Artificial Sequence			
344	<220> FEATURE:			
345	<223> OTHER INFORMATION: Nhe1/5AB-R primer			
348	<400> SEQUENCE: 4			
349	gggggctagc acctgtccat gtgtaggaca tcgagcagca gacaa			45
352	<210> SEQ ID NO: 5			
353	<211> LENGTH: 30			
354	<212> TYPE: DNA			
355	<213> ORGANISM: Artificial Sequence			
357	<220> FEATURE:			
358	<223> OTHER INFORMATION: BamHI/CaM F primer			
361	<400> SEQUENCE: 5			
362	gggggatcca tgcatgacca actgacagaa			30
365	<210> SEQ ID NO: 6			

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/506,925

DATE: 09/17/2004

TIME: 15:30:18

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09172004\J506925.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date